REMARKS

Claims 1-116 are pending in the application, claims 1-26, 53-69, 87-95, 105-109, and 115 having been withdrawn from consideration as a result of a previous restriction requirement, and claims 27-52, 70-86, 96-104, 110-114, and 116 having been elected for examination. Claims 27, 70, 96, 110, and 116 are the only independent claims.

In a preliminary matter, Applicant notes that the Office Action does not indicate whether or not the originally filed drawings have been accepted. Applicant respectfully requests that the Examiner provide the appropriate acknowledgement in a future communication.

Applicant notes with appreciation that the IDS papers have been signed and acknowledged by the Examiner.

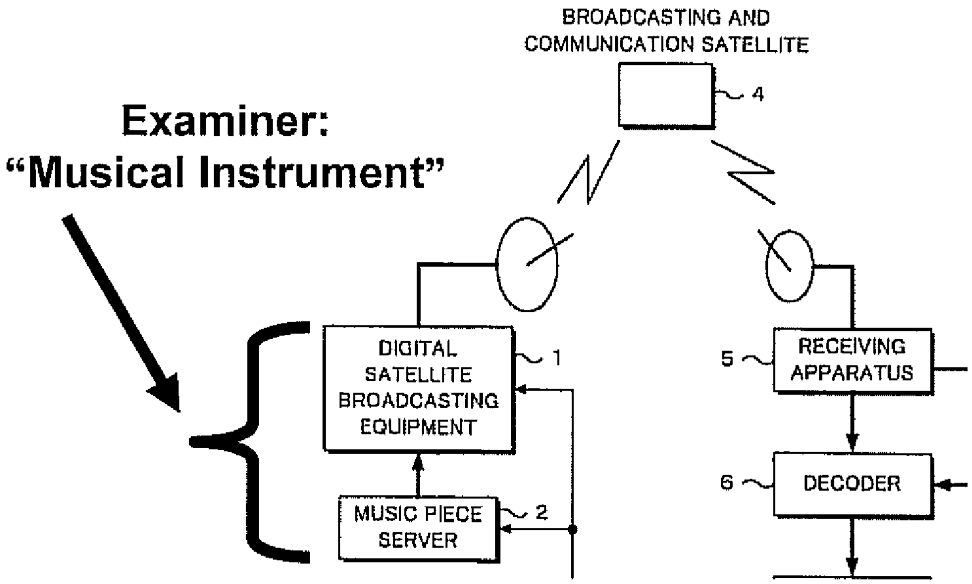
Claims 27-52, 70-86, 96-104, 110-114, and 116 stand rejected under 35 U.S.C. §102(a) as being anticipated by Ishigaki et al. (U.S. 6,271,455). Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishigaki. Applicant respectfully traverses these rejections, and requests reconsideration and allowance of the pending claims in view of the following arguments.

Rejection under 35 U.S.C. §102(a) as being anticipated by Ishigaki

Claims 27-52, 70-86, 96-104, 110-114, and 116 stand rejected under 35 U.S.C. §102(a) as being anticipated by Ishigaki.

1. No musical instrument is taught

Applicant first submits that Ishigaki does not teach or suggest the "external musical instrument" referred to in claim 27. The Action repeatedly refers to all of FIG. 2 as teaching this element (Office Action, pg. 2). However, Applicant does not understand how the collective system of FIG. 2 could be interpreted as a musical instrument. The various sub-components of FIG. 2 are categorized as two distinct systems; namely, digital satellite broadcasting equipment 1 and music piece server 2. FIG. 1 of Ishigaki provides a high-level illustration of these components, relevant portions of which are provided below.


BROADCASTING AND COMMUNICATION SATELLITE
4
Examiner: "Musical Instrument"
DIGITAL SATELLITE BROADCASTING EQUIPMENT
1
MUSIC PIECE SERVER
2
5
RECEIVING APPARATUS
6
DECODER

The above partial illustration of FIG. 1 of Ishigaki has been annotated in accordance with the position set forth in the Action. Applicant submits that the broadcasting equipment 1 and associated server 2, either individually or collectively as alleged in the Action, teach or suggest a "musical instrument." Clarification is respectfully requested as to how broadcasting equipment 1 and server 2 can reasonably be interpreted as a "musical instrument."

2. Inconsistencies – one signal cannot simultaneously be a control signal and an audio signal

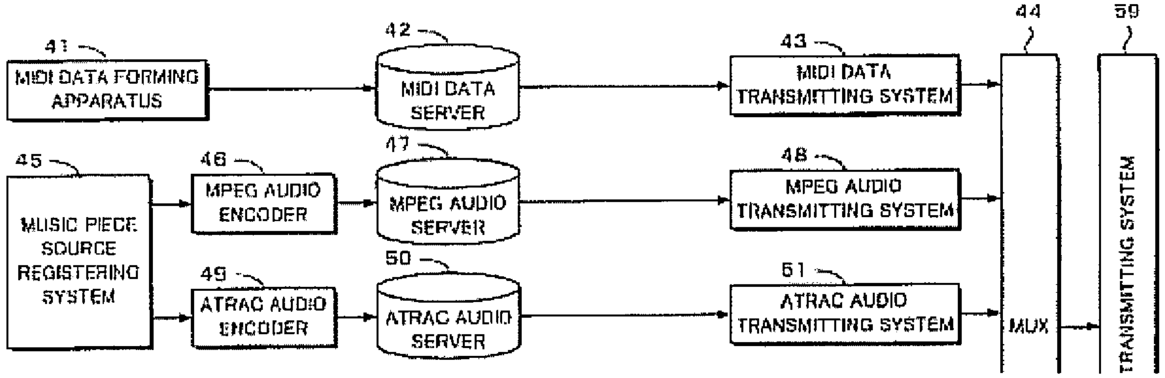
Claim 27 is directed toward a method for interconnecting electronic musical instruments and signal processing systems and recites "receiving MIDI control signals at an outgoing control interface." Page 2 of the Action indicated that the signals provided by system 43 teach the claimed "MIDI control signals." This rejection is interesting since this very signal from system 43 is used to teach "audio signals," which are also recited in this claim (this aspect is discussed below in point 3). According to the Examiner, an identical signal (the signal from system 43) has the rather unique property of simultaneously being both (1) an audio signal; and (2) a MIDI control signal. This clearly is not possible, and the rejection lacks sufficient factual and technical basis.

To further confuse matters, the present Action additionally indicates that Fig. 2 of Ishigaki teaches "receiving non-MIDI control signals at an outgoing control interface." (Action, pg. 4, para. 2). Applicant's reading of the Action finds that, apparently, Ishigaki is also alleged to disclose a signal which simultaneously has three properties: (1) an audio signal; (2) a MIDI control signal; and (3) a non-MIDI signal. This also is not possible for obvious reasons. Note that Applicant's understanding of this deficiency is limited since the rejection simply refers to Fig. 2 of Ishigaki as providing the described teaching, and does not particularly identify the specific portions which are being relied upon.

Applicant's point on this issue is as follows. If the signals from system 43 indeed provide "MIDI control signals," then the "audio signal" feature of claim 27 is not taught, and this claim is patentable over the cited patent. Alternatively, if the signal from system 43 is deemed an "audio signal," then the "MIDI control signals" feature of claim 27 is not taught, and this claim is patentable over the cited patent for this alternative reason.

3. Ishigaki does not teach “audio signals “

Claim 27 further recites “receiving instrument audio signals at an outgoing multi-channel audio interface, wherein said instrument audio signals comprise at least three independent audio signals generated by an external musical instrument.” Page 2 of the Office Action indicated that systems 43, 48, and 51 teach the “three independent audio signals” aspect, and MUX 44 teaches the claimed “audio interface.” Applicant respectfully disagrees with the position set forth in the Action for the following reasons. For the convenience of the Examiner, reproduced below are the relevant portions of FIG. 2 of Ishigaki which relate to this portion of the rejection.


41
MIDI DATA FORMING APPARATUS
42
MIDI DATA SERVER
43
MIDI DATA TRANSMITTING SYSTEM
44
59
45
MUSIC PIECE SOURCE REGISTERING SYSTEM
46
MPEG AUDIO ENCODER
47
MPEG AUDIO SERVER
48
MPEG AUDIO TRANSMITTING SYSTEM
49
ATRAC AUDIO ENCODER
50
ATRAC AUDIO SERVER
51
ATRAC AUDIO TRANSMITTING SYSTEM
MUX
TRANSMITTING SYSTEM

As a first point, Applicant submits that none of the systems 43, 48, and 51 provide “audio signals.” For instance, system 43 is described as transmitting packetized MIDI data. (Ishigaki, col. 5, lines 9-12). System 48 is described as packetizing MPEG audio data, and system 51 apparently provides packetized adaptive transform acoustic coding (ATRAC) data. (Ishigaki, col. 5, lines 19-25). For the assertions of the Office Action to be valid, each of the packetized MIDI data, MPEG audio data, and ATRAC data must each be interpreted as an "audio signal." However, Applicant submits, this not the case.

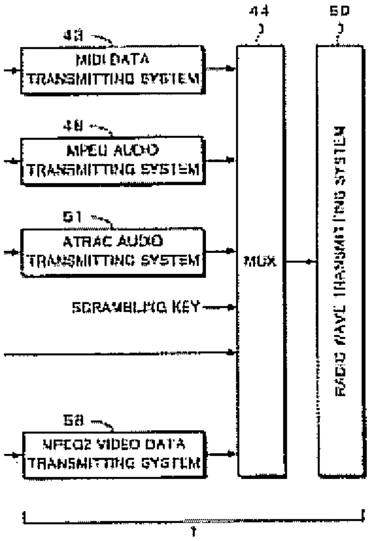
Applicant recognizes that the MPEG audio data from system 48 mentions the term "audio," but the mere mention of this word does not make this data an "audio signal." To do so is to construe this term in a manner which is inconsistent with the present specification, as well as the generally understood meaning of this term as it is recognized by those of ordinary skill in the art. Similarly, ATRAC data relates to the family of proprietary audio compression algorithms used to store information on MiniDiscs offered by various manufactures, the most notable being Sony. In sum, ATRAC data is not an "audio signal" as recited in claim 27.

Lastly, the MIDI data from system 43 is considered. This is a topic which has repeatedly surfaced in Applicant's other applications which have been assigned to Examiner Fletcher. See, e.g., the prosecution history of Ser. No. 09/812,400. In particular, Applicant has explained numerous times that it is a basic fact of music technology that MIDI is a message-based digital control signal format. MIDI signals are digital control signals, not audio signals. A MIDI control data message is a far cry from being an "audio signal." Applicant is unaware of any authority which would consider MIDI data the same or equivalent to an "audio signal." Indeed there is a vast body of works which support the contrary; MIDI data is not the same thing as an audio signal. Should it later become necessary, Applicant stands ready to provide the various citations and/or declarations in support of this position.

Applicant submits that systems 43, 48, and 51 collectively do not provide a single audio signal, much less the claimed "at least three independent audio signals." Should the rejection be maintained, Applicant respectfully requests that the Examiner confirm the position that each of the packetized MIDI data, MPEG audio data, and ATRAC data is an "audio signal."

4. No outgoing interface is taught

The Office Action further alleges that the claimed "outgoing multi-channel audio interface" is taught by the MUX 44 component of the digital satellite broadcasting equipment 1. Relevant portions of FIG. 2 of Ishigaki are provided below.


44
59
43
MIDI DATA TRANSMITTING SYSTEM
48
MPEG AUDIO TRANSMITTING SYSTEM
51
ATRAC AUDIO TRANSMITTING SYSTEM
MUX
RADIO WAVE TRANSMITTING SYSTEM
SCRAMBLING KEY
58
MPEG2 VIDEO DATA TRANSMITTING SYSTEM
1

This figure shows MUX 44 multiplexing signaling from systems 43, 48, 51, and 58, and other data. Assuming *arguendo* that MUX 44 is an "interface," this component provides signaling to an internal component of digital satellite broadcasting equipment 1; namely, radio wave transmitting system 59. The important point here is that MUX 44 provides, at best, an internal interface. There is no teaching or suggestion that MUX 44 provides an outgoing interface, much less the claimed "outgoing multi-channel audio interface."

In view of the foregoing, Ishigaki fails to teach or suggest a number of features recited in claim 27, and therefore this claim is believed to be patentable. Independent claims 70 and 96 include language similar to that of claim 27, and thus, are each believed to be patentable for reasons similar to those discussed with regard to claim 27. Dependent claims 28-52, 71-86, and 97-104 are believed to be patentable at least by virtue of their respective dependencies on the patentable independent claims. Applicant provides the following additional comments with regard to the remaining independent claims.

5. Claims 110 and 116

Applicant turns now to the rejection to independent claims 110 and 116. Pg. 2 of the Action indicates that these claims have been rejected over Ishigaki. However, Applicant has thoroughly reviewed the Action and is unable to locate any discussion, whatsoever, relating to these claims. A response by the Applicant is not possible since there is nothing to respond to.

As a general comment, Applicant notes that the five-page rejection lists the purported teachings of Ishigaki, but the rejection does not specifically identify the claim numbers in association with the wording of the rejection. The rejection simply identifies the patent, without reference to any particular claim number, and states that the patent discloses a number of features. This makes it extremely difficult for Applicant to identify the basis of the rejection as applied to a particular claim. In the event that the rejection is maintained, Applicant requests that the Examiner identify the particular parts of Ishigaki which are relied upon. Such a request is believed proper based upon the requirements of MPEP § 707, citing 37 CFR § 1.104(c)(2), which provides:

> "… When a reference is complex or shows or describes other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified."

Regardless, Applicant has reviewed the Ishigaki patent and is unable to find any teaching of, for example, the following:

- "wherein said incoming MIDI control signals are generated by a first electronic music system;" or
- "providing said incoming MIDI control signals to a second electronic music system."

For at least these reasons, independent claims 110 and 116 are believed to be patentable. Dependent claims 111-114 are also believed to be patentable at least by virtue of their dependence on patentable independent claim 111.

Rejection under 35 U.S.C. § 103(a)

Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishigaki, in view of Official Notice taken by the Examiner. Applicant submits that this claim is patentable at least by virtue of its dependency on patentable claim 27.

CONCLUSION

In light of the above remarks, Applicant submits that the present Response places all claims of the present application in condition for allowance. Reconsideration of the application is requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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